

REMARKS

Claims 38-46, 48-49, 52 and 56-246 are pending in the present application.

Claims 38-46, 52, 56-156 and 187-246 stand allowed in the present application.

Claims 48-49 and 157-186 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,168,271 to Hoff ("*Hoff*") in view of published UK Patent Application GB 2,250,892 to Owen ("*Owen*").

Claim 48 has been amended by the present amendment.

For at least the reasons stated below, the Applicants submit that all pending claims are allowable.

Amendments to Previous Claims

The present amendment amends claim 48 to clarify language that the Office Action characterized as unclear. The Applicants believe that former claim 48 was clear in referring to "*the* selected time intervals", which was introduced for antecedent basis in the preamble. Nonetheless, to advance prosecution of the present application, the Applicants have amended claim 48 to relocate the phrase "in a sleep mode". The Applicants believe that such amendment should address the Examiner's concerns. If, however, the Examiner disagrees, the Applicants invite the Examiner to contact the undersigned representative of the Applicants to efficiently address the Examiner's concerns (*e.g.*, via Examiner amendment).

Rejections Under 35 U.S.C. § 103

Claims 48-49 and 157-186 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over *Hoff* in view of *Owen*. The Applicants respectfully traverse such rejections.

MPEP § 2142 states that in order for a *prima facie* case of obviousness to be established, three basic criteria must be met, one of which is that the reference or combination of references must teach or suggest all of the claim limitations. MPEP § 2143.03 states that to establish a *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974).

As an initial matter, the Applicants submit that *Owen* is not prior art to the rejected claims of the present application. *Owen* was published in the United Kingdom on June 17, 1992.

Each of claims 48-49 and 157-186 is entitled to an effective filing date prior to June 17, 1992. For example and without limitation, the present application claims priority to and benefit from patent application PCT/US92/03982, filed on May 13, 1992 ("the '982 Application"). As a non-limiting example of support in such application for independent claim 48, the Applicants refer the Examiner to FIGs. 18 and 28-30 of the '982 Application and the corresponding textual discussion. For example and without limitation, in discussing the exemplary communication environment of FIG. 18 at page 48, the '982 Application discusses base stations sending hello messages every one second. Then at pages 105-106, the '982 Applications specifically refers to the communication environment of FIG. 18 and the roaming terminal operating in sleep mode by alternately turning off for five seconds and on for one second.

For non-limiting exemplary support in the '982 Application for dependent claims 49 and 157-186, the Applicants refer the Examiner to the following list:

Claim 49	'982 Application, pages 68-69
Claim 157	'982 Application, pages 37-38
Claim 158	'982 Application, pages 45-47
Claim 159	'982 Application, pages 47-49
Claim 160	'982 Application, pages 47-49
Claim 161	'982 Application, pages 59-61
Claim 162	'982 Application, pages 59-61
Claim 163	'982 Application, pages 59-61
Claim 164	'982 Application, pages 67-69
Claim 165	'982 Application, pages 67-69
Claim 166	'982 Application, pages 67-69
Claim 167	'982 Application, pages 67-69
Claim 168	'982 Application, pages 67-69
Claim 169	'982 Application, pages 67-69
Claim 170	'982 Application, pages 67-69
Claim 171	'982 Application, pages 68-70
Claim 172	'982 Application, pages 68-70
Claim 173	'982 Application, pages 68-70
Claim 174	'982 Application, pages 68-70
Claim 175	'982 Application, pages 74-76
Claim 176	'982 Application, pages 68-70
Claim 177	'982 Application, pages 68-70
Claim 178	'982 Application, pages 76-78
Claim 179	'982 Application, pages 78-80
Claim 180	'982 Application, pages 80-82
Claim 181	'982 Application, pages 82-84

Claim 182	'982 Application, pages 105-106
Claim 183	'982 Application, pages 105-106
Claim 184	'982 Application, pages 106-107
Claim 185	'982 Application, pages 107-108
Claim 186	'982 Application, pages 107-108

Since *Owen* does not appear to be statutory prior art for the presently pending claims, the Applicants submit that the Office Action has not set forth a *prima facie* case of obviousness that meets the mandates of MPEP § 2142. Accordingly, the Applicants respectfully submit that claims 48-49 and 157-186 are allowable over *Owen*, singly or in combination with any other reference, including *Hoff*.

Though the Applicants do not believe that *Owen* is statutory prior art for the presently pending claims, in the spirit of advancing prosecution of the presently pending claims, the Applicants will address particular points regarding *Hoff* and/or *Owen*.

Turning first to independent claim 48, such claim, as currently amended, is directed toward a data communication method for a communication system having one or more base stations that transmit via radio frequency a pending message list at each of selected time intervals and at least one roaming terminal having a radio frequency transceiver, the method comprising: deactivating the roaming terminal's transceiver in a sleep mode through a plurality of the selected time intervals; and synchronizing the activation of the roaming terminal's radio frequency transceiver to receive the pending message list following the sleep mode.

The Office Action, at § 3 states, "Note that it is not clear whether 'the selected time intervals *in a sleep mode*' are the same time intervals selected for transmission of the pending message list as noted in the preamble. For the purposes of this rejection, they have not been treated as the same". As discussed previously, claim 48 has been amended to clarify that "the selected time intervals" in the body of claim 48 are the same as the "selected time intervals" introduced in the preamble of claim 48. Accordingly, the Applicants respectfully request that for future examination of claim 48 and its dependent claims, the Examiner treat such "selected time intervals" as synonymous.

The Office Action, in § 3, states that *Hoff* teaches "a data communication method for a system having one or more base stations and at least one roaming terminal having a radio

frequency transceiver (*Hoff* see especially figure 2A) comprising synchronizing the activation of the terminals radio frequency transceiver to receive the pending message list following a sleep mode (*Hoff* see especially column 4, line 58 – column 5, line 25, column 17, lines 15-35, column 22, lines 40-65)". The Applicants respectfully disagree with this characterization of *Hoff*.

For example and without limitation, *Hoff*, at col. 4 line 50 to col. 5 line 25, discusses pagers being assigned periodic timeslots for messages destined for the pagers. A periodic time frame is made of sub-frames, which in turn are made of timeslots. A pager receiver will receive messages in the pager receiver's assigned timeslot. Also for example, *Hoff*, at col. 17 lines 15-35, discusses messages being transmitted to a pager in the pager's assigned timeslot so that the receiver portion of the pager need only be active during the pager's assigned timeslot. Further for example, *Hoff*, at col. 22 lines 40-65, discusses a power-limited pager receiver turning on during its assigned timeslot to determine if a packet sent from a base station in the timeslot is addressed to the receiver. *Hoff* does not mention the transmission of a pending message list nor reception of such a pending message list by a roaming terminal. At most, *Hoff* discusses a base station merely transmitting its messages rather than transmitting a list of messages that are pending, and a pager receiving a message rather than a list of messages that are pending.

Additionally, *Hoff* discusses a paging network with roaming pagers that receive paging messages from the paging network. Applicants were unable to find mention in *Hoff* of any of the roaming pagers having transceivers.

On page 3, the Office Action admits that *Hoff* lacks a teaching of deactivating the roaming terminal's transceiver through a plurality of selected time intervals in a sleep mode. The Office Action attempts to utilize the teachings of *Owen* to fill this particular gap in *Hoff*'s teachings. In particular, the Office Action states that *Owen* "teaches a system in which roaming terminals selectively deactivate the terminal's radio frequency transceiver through a plurality of the selected time intervals in a sleep mode and synchronize the activation of the terminal's radio frequency transceiver to receive a beacon following the plurality of the selected time intervals (*Owen* see especially page 3, line 10 – page 4, line 18). *Owen* teaches that this allows for enhanced power saving when the roaming terminal has roamed out of coverage range (*Owen* see page 3, lines 29-35)". Even if, for the sake of argument only, the Office Action characterization of *Owen* is correct, the Applicants submit that the teachings of *Owen* are not reasonably

combined with the teachings of *Hoff*.

For example, in pages 3-4, *Owen* presents a progressive lengthening of a station's scanning procedure to save power when a station is out of range of the network. The Applicants submit that integrating the *Owen* progressive lengthening technique into the *Hoff* system would result in significantly undesirable system behavior. For example, the *Hoff* system is a paging system in which the paging network cycles through paging messages to be transmitted in a periodic timeframe. A pager must wake to receive messages sent in a periodic timeslot assigned to the pager. If a pager is not awake during the pager's timeslot to receive its paging message, the message is lost. If the *Hoff* system were modified to include deactivating a pager's receiver "in a sleep mode through a plurality of the selected time intervals" and synchronizing activation of the pager's receiver "to receive the pending message list following the sleep mode", in a manner generally analogous to that stated in claim 48, the *Hoff* system would lose an unacceptably large number of paging messages. Since integrating the *Owen* progressive lengthening technique into the *Hoff* system would result in such undesirable behavior, the Applicants submit that such integration is unreasonable.

For at least the above-mentioned reasons, the Applicants submit that claim 48 is allowable over *Hoff* and/or *Owen*, as are all claims depending therefrom, including claims 49 and 157-186. The Applicants also submit that each of claims 49 and 157-186 is independently allowable.

Turning next to claim 49, such claim depends from claim 48 and states, "further comprising transmitting timing information regarding the selected time intervals from a base station". The Office Action, at page 3 states, "Hoff in view of Owen as applied to claim 48 teaches the step of transmitting timing information regarding the selected time intervals from a base station". However, the Office Action does not indicate where *Hoff* and/or *Owen* make such a teaching. The Applicants were unable to locate this teaching by *Hoff* and/or *Owen*. Accordingly, the Applicants respectfully request that the Examiner indicate where *Hoff* and/or *Owen* make such a teaching.

Turning next to claim 157, such claim depends from claim 48 and states, "wherein the transceiver of the roaming terminal is a spread spectrum transceiver". The Office Action, at page 4, states, "Official Notice is taken that it is notoriously well known in the art to use spread

spectrum transmission. Therefore it would have been obvious to one of ordinary skill in the art to modify Hoff as shown in the claims in order to utilize an interference resistant modulation system.” The Applicants respectfully disagree with this statement. For example even if, for the sake of argument only, spread spectrum communication was known at the time of invention, it is not necessarily obvious to incorporate a spread spectrum receiver into the invention as claimed. The Applicants respectfully request that the Examiner provide documentary evidence to support the above-mentioned assertions, particularly prior to any Final Action on the merits.

Turning next to claim 158, such claim depends from claim 48 and thus is allowable for at least the reasons discussed previously with regard to claim 48. The Applicants also submit that claim 158 is independently allowable.

Turning next to claim 159, such claim depends from claim 48 and states, “further comprising activating the transceiver to receive a pending message list for up to a maximum listening period, where the maximum listening period is at least a maximum expected time interval between consecutive pending message list transmissions”. The Office Action, at page 4, states, “Hoff lacks a teaching of the method of claim 48, further comprising activating the transceiver to receive a pending message list for up to a maximum listening period, where the maximum listening period is at least a maximum expected time interval between consecutive pending message list transmissions. Note that that interval would be the maximum time interval between messages. Therefore it would have been obvious to one of ordinary skill in the art to modify Hoff as shown in the claims to fit this system constraint.” The Applicants respectfully disagree with this statement. For example, as explained previously the Hoff system does not include communicating a pending message list, so the phrase “where the maximum listening period is at least a maximum expected time interval between consecutive pending message list transmissions” does not make sense in the context of the Hoff system. For at least this additional reason, the Applicants submit that claim 159 is allowable over *Hoff* and/or *Owen*.

Turning next to claim 160, such claim depends from claim 48 and states, “further comprising determining whether to consider a received pending message list transmission based, at least in part, on signal strength”. The Office Action, at page 4, states, “Hoff teaches the method of claim 48, further comprising determining whether to consider a received pending message list transmission based, at least in part, on signal strength. Note that, of course

reception would not be possible if the signal strength were too low.” The Applicants submit that the above-mentioned statement fails to address the explicit language of claim 160. For example, even if true, the mere fact that reception would not be possible if the signal strength were too low says nothing with regard to determining whether to consider a received pending message list transmission based, at least in part, on signal strength. For at least this additional reason, the Applicants submit that claim 160 is allowable over *Hoff* and/or *Owen*.

Turning next to claim 161, such claim depends from claim 48 and thus is allowable for at least the reasons discussed previously with regard to claim 48. The Applicants also submit that claim 161 is independently allowable.

Turning next to claim 162, such claim depends from claim 48 and states, “further comprising performing batch file transfer between the roaming terminal and a base station of the communication system”. The Office Action, at page 5, states, “Official Notice is taken that it is notoriously well known in the art to use batch processing of messages. Therefore it would have been obvious to one of ordinary skill in the art to modify Hoff as shown in the claims in order to utilize a high efficiency method.” The Applicants respectfully disagree with such statement. For example, even if true, the mere fact that batch processing of messages might be known says nothing about integrating batch file transfer into the invention as claimed. Thus, the Applicants respectfully request that the Examiner provide documentary evidence to support the above-mentioned assertions, particularly prior to any Final Action on the merits.

Turning next to claim 163, such claim depends from claim 48 and states, “further comprising performing on-line data entry with the roaming terminal”. The Office Action, at page 5, states, “Official Notice is taken that it is notoriously well known in the art to perform data entry with roaming terminals. Therefore it would have been obvious to one of ordinary skill in the art to modify Hoff as shown in the claims in order to allow for ease of data entry.” The Applicants respectfully disagree with such statement. For example, even if true, the mere fact that on-line data entry might be known says nothing about integrating on-line data entry with the roaming terminal, as claimed. For at least this additional reason, the Applicants submit that claim 163 is allowable over *Hoff* and/or *Owen*. Also, the Applicants respectfully request that the Examiner provide documentary evidence to support the above-mentioned assertions, particularly prior to any Final Action on the merits.

Turning next to claim 164, such claim depends from claim 48 and states, “further comprising calculating an expected time for a pending message list transmission”. The Office Action, at page 5, states, “Official Notice is taken that it is notoriously well known in the art to calculate transmission times, therefore it would have been obvious to one of ordinary skill in the art to modify Hoff as shown in the claims in order to ensure that time for transmissions were adequate.” The Applicants respectfully disagree with such statement. For example, even if true, the mere fact that calculating a transmission might be known says nothing about integrating the calculation of an expected time for a pending message list transmission into the invention as claimed. For at least this additional reason, the Applicants submit that claim 164 is allowable over *Hoff* and/or *Owen*. Also, The Applicants respectfully request that the Examiner provide documentary evidence to support the above-mentioned assertions, particularly prior to any Final Action on the merits.

Turning next to claim 165, such claim depends from claim 48 and states, “further comprising calculating an expected time for a pending message list transmission based, at least in part, on timing information received with a previous pending message list transmission”. The Office Action, at page 5, states, “Official Notice is taken that it is notoriously well known in the art to utilize current system data in monitoring. Therefore it would have been obvious to one of skill in the art to modify Hoff as shown in the claims in order to ensure that calculations were based on current system data.” The Applicants respectfully disagree with such statement. For example, even if true, the mere fact that current system data might be used in monitoring says nothing about calculating an expected time for a pending message list transmission based on timing information received with a previous pending message list transmission. For at least this additional reason, the Applicants submit that claim 165 is allowable over *Hoff* and/or *Owen*. Also, the Applicants respectfully request that the Examiner provide documentary evidence to support the above-mentioned assertions, particularly prior to any Final Action on the merits.

Turning next to claim 166, such claim depends from claim 48 and states, “further comprising calculating an expected time for a pending message list transmission based, at least in part, on seed information received in a previous transmission”. The Office Action, on page 6, states, “Official Notice is taken that it is notoriously well known in the art to use seed information. Therefore it would have been obvious to one of ordinary skill in the art to modify

Hoff as shown in the claims in order to perform data transmission as efficiently as possible. The Applicants respectfully disagree with such statement. For example, even if true, the mere fact that it might be known to use seed information says nothing about calculating an expected time for a pending message list transmission based on seed information received in a previous transmission. For at least this additional reason, the Applicants submit that claim 166 is allowable over *Hoff* and/or *Owen*. Also, the Applicants respectfully request that the Examiner provide documentary evidence to support the above-mentioned assertions, particularly prior to any Final Action on the merits.

Turning next to claim 167, such claim depends from claim 48 and states, “wherein deactivating the roaming terminal’s transceiver comprises powering down circuitry of the transceiver”. The Office Action, on page 6, states, “Hoff in view of Owen teaches the method of claim 48, wherein deactivating the roaming terminal’s transceiver comprises powering down circuitry of the transceiver (*Owen see especially page 3, line 10 – page 4, line 18*).” The Applicants respectfully disagree with this statement. For example, the Applicants were unable to find mention of powering down transceiver circuitry. At the pages cited in the Office Action, for example, *Owen* merely adjusts the frequency of scanning to reduce energy consumption. The Applicants were unable, for example, to find mention of *Owen* actually powering down the transceiver circuitry between scans (*e.g.*, as opposed to merely not actively utilizing such circuitry). For at least this additional reason, the Applicants submit that claim 167 is allowable over *Hoff* and/or *Owen*.

Turning next to claim 168, such claim depends from claim 48 and states, “further comprising determining a sleep time period based, at least in part, on an expected duration of a communication between another roaming terminal and a base station of the communication system”. The Office Action, at page 6, states, “Official Notice is taken that it is notoriously well known in the art to take current system conditions into account for transmission. Therefore it would have been obvious to one of ordinary skill in the art to modify Hoff as shown in the claims in order to ensure that current system conditions were taken into account.” The Applicants respectfully disagree with such statement. For example, even if true, the mere fact that current system conditions might be taken into account for transmission says nothing about determining a sleep time period based on an expected duration of a communication between another roaming

terminal and a base station of the communication system. For at least this additional reason, the Applicants submit that claim 168 is allowable over *Hoff* and/or *Owen*. Also, the Applicants respectfully request that the Examiner provide documentary evidence to support the above-mentioned assertions, particularly prior to any Final Action on the merits.

Turning next to claim 169, such claim depends from claim 48 and states, "further comprising determining a sleep time period based, at least in part, on message length information communicated between another roaming terminal and a base station of the communication system". The Office Action, at pages 6-7, states, "Official Notice is taken that it is notoriously well known in the art to take current system conditions into account for transmission". The Applicants respectfully disagree with such statement. For example, even if true, the mere fact that current system conditions might be taken into account for transmission says nothing about determining a sleep time period based on message length information communicated between another roaming terminal and a base station of the communication system. For at least this additional reason, the Applicants submit that claim 169 is allowable over *Hoff* and/or *Owen*. Also, the Applicants respectfully request that the Examiner provide documentary evidence to support the above-mentioned assertions, particularly prior to any Final Action on the merits.

Turning next to claim 170, such claim depends from claim 48 and states, "further comprising determining a sleep time period based, at least in part, on message length information transmitted by another roaming terminal". The Office Action, at page 7, states, "Official Notice is taken that it is notoriously well known in the art to take current system conditions into account for transmission. Therefore it would have been obvious to one of ordinary skill in the art to modify Hoff as shown in the claims in order to ensure that current system conditions were taken into account." The Applicants respectfully disagree with such statement. For example, even if true, the mere fact that current system conditions might be taken into account for transmission says nothing about determining a sleep time period based on message length information transmitted by another roaming terminal. For at least this additional reason, the Applicants submit that claim 170 is allowable over *Hoff* and/or *Owen*. Also, the Applicants respectfully request that the Examiner provide documentary evidence to support the above-mentioned assertions, particularly prior to any Final Action on the merits.

Turning next to claim 171, such claim depends from claim 48 and states, "wherein the

pending message list comprises information of messages stored for a plurality of sleeping terminals”. The Office Action, at page 7, states, “Hoff in view of Owen teaches the method of claim 48, wherein the pending message list comprises information of messages stored for a plurality of sleeping terminals (*Hoff see especially column 4, line 58 – column 5, line 25, column 17, lines 15-35, column 22, lines 40-65*).” The Applicants respectfully disagree with this characterization of *Hoff* and/or *Owen*. For example, as discussed previously with regard to claim 48, *Hoff* and/or *Owen* do not teach the pending message list of claim 48, much less particular contents of such a pending message list, as stated in claim 171. For at least this additional reason, the Applicants submit that claim 171 is allowable over *Hoff* and/or *Owen*.

Turning next to claim 172, such claim depends from claim 48 and states, “wherein the pending message list comprises information indicating that a message awaits delivery to the roaming terminal”. The Office Action, at page 7, states, “Hoff teaches the method of claim 48, wherein the pending message list comprises information indicating that a message awaits delivery to the roaming terminal (*Hoff see especially column 4, line 58 – column 5, line 25, column 17, lines 15-35, column 22, lines 40-65*).” The Applicants respectfully disagree with this characterization of *Hoff*. For example, as discussed previously with regard to claim 48, *Hoff* and/or *Owen* do not teach the pending message list of claim 48, much less particular contents of such a pending message list, as stated in claim 172. For at least this additional reason, the Applicants submit that claim 172 is allowable over *Hoff* and/or *Owen*.

Turning next to claim 173, such claim depends from claim 48 and states, “wherein the pending message list comprises information from which the roaming terminal determines whether a message awaits delivery to the roaming terminal”. The Office Action, at page 7, states, “Hoff teaches the method of claim 48; wherein the pending message list comprises information from which the roaming terminal determines whether a message awaits delivery to the roaming terminal (*Hoff see especially column 4, line 58 – column 5, line 25, column 17, lines 15-35, column 22, lines 40-65*).” The Applicants respectfully disagree with this characterization of *Hoff*. For example, as discussed previously with regard to claim 48, *Hoff* and/or *Owen* do not teach the pending message list of claim 48, much less particular contents of such a pending message list, as stated in claim 173. For at least this additional reason, the Applicants submit that claim 173 is allowable over *Hoff* and/or *Owen*.

Turning next to claim 174, such claim depends from claim 48 and states, “further comprising determining from a received pending message list whether a message for the roaming terminal is awaiting delivery”. The Office Action, at page 8, states, “Hoff teaches the method of claim 48, further comprising determining from a received pending message list whether a message for the roaming terminal is awaiting delivery (*Hoff see especially column 4, line 58 – column 5, line 25, column 17, lines 15-35, column 22, lines 40-65*).” The Applicants respectfully disagree with this characterization of *Hoff*. For example, as discussed previously with regard to claim 48, *Hoff* and/or *Owen* do not teach the pending message list of claim 48, much less determining from a received pending message list whether a message for the roaming terminal is awaiting delivery, as stated in claim 174. For at least this additional reason, the Applicants submit that claim 174 is allowable over *Hoff* and/or *Owen*.

Turning next to claim 175, such claim depends from claim 48 and states, “further comprising in response to a received pending message list indicating that a message awaits delivery to the roaming terminal, directing the transceiver to transmit a message requesting delivery of one or more pending messages to the roaming terminal”. The Office Action, at page 8, states, “Hoff teaches the method of claim 48, further comprising in response to a received pending message list indicating that a message awaits delivery to the roaming terminal, directing the transceiver to transmit a message requesting delivery of one or more pending messages to the roaming terminal (*Hoff see especially column 4, line 58 – column 5, line 25, column 17, lines 15-35, column 22, lines 40-65*).” The Applicants respectfully disagree with this characterization of *Hoff*. For example, as discussed previously with regard to claim 48, *Hoff* and/or *Owen* do not teach the pending message list of claim 48. Additionally, the Applicants were unable to find mention of *Hoff* of the roaming terminal transceiver requesting delivery of one or more pending messages to the roaming terminal. For at least this additional reason, the Applicants submit that claim 175 is allowable over *Hoff* and/or *Owen*.

Turning next to claim 176, such claim depends from claim 48 and states, “wherein the pending message list comprises information indicating that one or more messages are stored at a node of the communication system and awaiting delivery to the roaming terminal”. The Office Action, at page 8, states, “Hoff teaches the method of claim 48, wherein the pending message list comprises information indicating that one or more messages are stored at a node of the

communication system and awaiting delivery to the roaming terminal (*Hoff see especially column 4, line 58 – column 5, line 25, column 17, lines 15-35, column 22, lines 40-65*).” The Applicants respectfully disagree with this characterization of *Hoff*. For example, as discussed previously with regard to claim 48, *Hoff* and/or *Owen* do not teach the pending message list of claim 48, much less particular information that such a pending message list might comprise, as stated in claim 176. For at least this additional reason, the Applicants submit that claim 176 is allowable over *Hoff* and/or *Owen*.

Turning next to claim 177, such claim depends from claim 48 and states, “wherein the pending message list comprises information indicating that one or more messages are stored in a base station of the communication system and awaiting delivery to the roaming terminal”. The Office Action, at page 8, states, “*Hoff* teaches the method of claim 48, wherein the pending message list comprises information indicating that one or more messages are stored in a base station of the communication system and awaiting delivery to the roaming terminal (*Hoff see especially column 4, line 58 – column 5, line 25, column 17, lines 15-35, column 22, lines 40-65*).” The Applicants respectfully disagree with this characterization of *Hoff*. For example, as discussed previously with regard to claim 48, *Hoff* and/or *Owen* do not teach the pending message list of claim 48, much less particular information that such a pending message list might comprise, as stated in claim 177. For at least this additional reason, the Applicants submit that claim 177 is allowable over *Hoff* and/or *Owen*.

Turning next to claim 178, such claim depends from claim 48 and states, “further comprising operating the roaming terminal in an awake state if a predetermined number of expected signals from the communication system are not received”. The Office Action, at pages 8-9, states, “*Hoff* teaches the method of claim 48, further comprising operating the roaming terminal in an awake state if a predetermined number of expected signals from the communication system are not received (*Hoff see especially column 4, line 58 – column 5, line 25, column 17, lines 15-35, column 22, lines 40-65*).” The Applicants respectfully disagree with this characterization of *Hoff*. For example, the Applicants were unable to find mention in *Hoff* (in the cited sections or anywhere) of “operating the roaming terminal in an awake state if a predetermined number of expected signals from the communication system are not received”. For at least this additional reason, the Applicants submit that claim 178 is allowable over *Hoff*

and/or *Owen*.

Turning next to claim 179, such claim depends from claim 48 and is thus allowable for at the reasons discussed previously with regard to claim 48. The Applicants also submit that claim 179 is independently allowable.

Turning next to claim 180, such claim depends from claim 48 and states, “wherein the pending message list comprises information of mail messages awaiting delivery to the roaming terminal”. The Office Action, at page 9, states, “Hoff teaches the method of claim 48, wherein the pending message list comprises information of mail messages awaiting delivery to the roaming terminal (*Hoff* see especially column 4, line 58 – column 5, line 25, column 17, lines 15-35, column 22, lines 40-65).” The Applicants respectfully disagree with this characterization of *Hoff*. For example, as discussed previously with regard to claim 48, *Hoff* and/or *Owen* do not teach the pending message list of claim 48, much less particular information that such a pending message list might comprise, as stated in claim 180. For at least this additional reason, the Applicants submit that claim 180 is allowable over *Hoff* and/or *Owen*.

Turning next to claim 181, such claim depends from claim 48 and states, “further comprising causing circuitry of the roaming terminal to enter a sleep mode for at least a portion of an expected delay to receive a message in response to a message sent from the roaming terminal”. The Office Action, at page 9, states, “Hoff teaches the method of claim 48, further comprising causing circuitry of the roaming terminal to enter a sleep mode for at least a portion of an expected delay to receive a message in response to a message sent from the roaming terminal (*Owen* see especially page 3, line 10 – page 4, line 18)”. The Applicants respectfully disagree with this characterization of *Owen*. For example, the Applicants were unable to find (in the cited sections or elsewhere) mention in *Owen* of the roaming terminal sending a message and then entering a sleep mode for at least a portion of an expected delay to receive a message in response to such a message sent from the roaming terminal. For at least this additional reason, the Applicants submit that claim 181 is allowable over *Hoff* and/or *Owen*.

Turning next to claim 182, such claim depends from claim 48 and is thus allowable for at least the reasons discussed previously with regard to claim 48. The Applicants also submit that claim 182 is independently allowable.

Turning next to claim 183, such claim depends from claim 48 and states, “further

comprising operating circuitry of the roaming terminal in an awake state for a first period of time if no message is received and for a second period of time, longer than the first period of time, if a message is received”. The Office Action, on page 9, states, “Hoff teaches the method of claim 48, further comprising operating circuitry of the roaming terminal in an awake state for a first period of time if no message is received and for a second period of time, longer than the first period of time, if a message is received (*Owen see especially page 3, line 10 – page 4, line 18*)”. The Applicants respectfully disagree with this characterization of *Owen*. For example, the Applicants were unable to find mention in *Owen* (in the cited sections or elsewhere) of operating circuitry of the roaming terminal in an awake state for a first period of time if no message is received and for a second period of time, longer than the first period of time, if a message is received. For at least this additional reason, the Applicants submit that claim 183 is allowable over *Hoff* and/or *Owen*.

Turning next to claim 184, such claim depends from claim 48 and states, “further comprising operating circuitry of the roaming terminal in an awake state in response to a user input and continuing operating circuitry of the roaming terminal in the awake state for a fixed time period following the user input”. The Office Action, at page 10, states, “Official Notice is taken that it is notoriously well known in the art to keep wireless devices on for a period of time after user input. Therefore it would have been obvious to one of ordinary skill in the art to modify Hoff as shown in the claims in order to ensure that the device was ready for additional input.” The Applicants respectfully disagree with such statement. For example, even if true, the mere fact that remaining awake after a user input is known says nothing about incorporating such activity into the claimed invention. For at least this additional reason, the Applicants submit that claim 184 is allowable over *Hoff* and/or *Owen*. Also, the Applicants respectfully request that the Examiner provide documentary evidence to support the above-mentioned assertions, particularly prior to any Final Action on the merits.

Turning next to claim 185, such claim depends from claim 48 and states, “further comprising operating circuitry of the roaming terminal in an awake state for at least an entire duration of a communication session with the communication system”. The Office Action, at page 10, states, “Official Notice is taken that it is notoriously well known in the art to keep wireless devices on for communication sessions. Therefore it would have been obvious to one of

ordinary skill in the art to modify Hoff as shown in the claims in order to ensure that the entire communication was received". The Applicants respectfully disagree with such statement. For example, even if true, the mere fact that remaining awake for an entire communication session might be known says nothing about incorporating such activity into the claimed invention, for example into a communication system that comprises the sleep mode capability of the present invention. For at least this additional reason, the Applicants submit that claim 185 is allowable over *Hoff* and/or *Owen*. Also, the Applicants respectfully request that the Examiner provide documentary evidence to support the above-mentioned assertions, particularly prior to any Final Action on the merits.

Turning next to claim 186, such claim depends from claim 48 and states, "further comprising operating circuitry of the roaming terminal in an awake state for a fixed time period following completion of a communication session with the communication system". The Office Action, at page 10, states, "Official Notice is taken that it is notoriously well known in the art to keep wireless devices on for a period of time after use. Therefore it would have been obvious to one of ordinary skill in the art to modify Hoff as shown in the claims in order to ensure that the device was ready for additional communication". The Applicants respectfully disagree with such statement. For example, even if true, the mere fact that keeping devices on for a period of time after use might be known says nothing about incorporating aspects of such operation into the claimed invention, for example into a communication system that comprises the sleep mode capability of the present invention". For at least this additional reason, the Applicants submit that claim 186 is allowable over *Hoff* and/or *Owen*. Also, the Applicants respectfully request that the Examiner provide documentary evidence to support the above-mentioned assertions, particularly prior to any Final Action on the merits.

Final Matters

The Office Action makes various statements regarding the *Hoff* reference, the *Owen* reference, 35 U.S.C. § 103, one of ordinary skill in the art, and Official Notice that are now moot in view of the previous amendments and/or discussion. Accordingly, the Applicants will not address all of such statements at the present time. The Applicants explicitly reserve the right to challenge such moot statements in the future should the need arise (*e.g.*, if any of such statements

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should reappear in a rejection of any claim in the future).

Summary

In summary, for at least the aforementioned reasons, the Applicants submit that all pending claims are in condition for allowance. Accordingly, the Applicants courteously solicit a Notice of Allowability with respect to all pending claims. To advance prosecution of the present application in an efficient manner, if the Examiner disagrees with the Applicants' positions stated above, or would like to discuss other aspects of the present application, the Applicants invite the Examiner to contact the Applicants' representative via telephone at the number below.

The Commissioner is hereby authorized to charge additional fees or credit overpayments to the deposit account of McAndrews, Held & Malloy, Account No. 13-0017.

Date: March 19, 2008

Respectfully submitted,

/Shawn L. Peterson/
Shawn L. Peterson
Reg. No. 44,286
Attorney for the Applicants

McANDREWS, HELD & MALLOY, LTD.
500 W. Madison, Suite 3400
Chicago, IL 60661
Telephone: (312) 775-8000